

REMARKS

This Amendment is being filed in response to the Final Office Action mailed April 1, 2009, which has been reviewed and carefully considered. It should be noted that the Office Action Summary indicates that the Office Action is non-final. However, on page 19, item 5, it is indicated that the Office Action is final. Clarification is respectfully requested. The present Amendment treats the Office Action mailed on April 1, 2009, as final. Entry of the present amendment and allowance of the present application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-2 and 4-21 are pending in the application, where claims 1, 8-9, 12, 19 and 21 are independent.

In the Final Office Action, the Examiner objected to the specification for lacking headings. Applicants respectfully decline to add the headings as they are not required in accordance with MPEP §608.01(a), and could be inappropriately used in interpreting the specification.

Section headings are not statutorily required for filing a

non-provisional patent application under 35 USC 111(a), but per 37 CFR 1.77 are only guidelines that are suggested for applicant's use. (See Miscellaneous Changes in Patent Practice, Response to comments 17 and 18 (Official Gazette, August 13, 1996) [Docket No: 950620162-6014-02] RIN 0651-AA75 ("Section 1.77 is permissive rather than mandatory. ... [T]he Office will not require any application to comply with the format set forth in 1.77").

It is respectfully submitted that "should" as recited in MPEP §608.01(a) is suggestive or permissive, and not mandatory as in "must" or "shall". For example, 37 CFR 1.77(b) recites:

The specification should include the following sections in order: (Emphasis added)

Similarly, 37 CFR 1.77(c) recites:

The text of the specification sections defined in paragraphs (b)(1) through (b)(12) of this section, if applicable, should be preceded by a section heading in uppercase and without underlining or bold type. (Emphasis added)

By contrast, 37 CFR 1.77(b)(5) recites:

(5) Reference to a "Sequence Listing," a table, or a computer program listing appendix submitted on a compact disc and an incorporation-by-reference of the material on the compact disc (see § 1.52(e)(5)). The total number of compact discs including duplicates and the files on each

compact disc shall be specified. (Emphasis added)

Thus, it is respectfully submitted that a distinction is made between "should" and "shall", where "should" is permissive, and "shall" is mandatory. Accordingly, it is respectfully submitted that headings are not required in accordance with MPEP §608.01(a), and withdrawal of the objection to the specification is respectfully requested.

In the Final Office Action, claims 8, 15-16, 18-21 are rejected under 35 U.S.C. §112, second paragraph for a certain informality. In response, claims 8, 18-19 and 21 have been amended to remove the noted informality. Accordingly, withdrawal of this rejection is respectfully requested.

In the Final Office Action, the Examiner indicated that claims 19-21 would be allowable if rewritten in independent form and to overcome the rejections under 35 U.S.C. §112, second paragraph. Applicants gratefully acknowledge the indication that claim 21 contains patentable subject matter. As noted above, the rejection to claims 19-21 under 35 U.S.C. §112, second paragraph has been overcome. Further, claims 19 and 21 have been rewritten in

independent form. Accordingly, it is respectfully submitted that claims 19 and 21 are in allowable form, and allowance thereof is respectfully requested. In addition, it is respectfully requested that claim 20 also be allowed at least based on its dependence from independent claim 19 as well as its individually patentable elements.

In the Final Office Action, claim 8 is rejected under 35 U.S.C. §102(b) over U.S. Patent No. 6,118,613 (Kojima). Further, claims 1-2 and 17 are rejected under 35 U.S.C. §103(a) over Kojima in view of U.S. Patent No. 4,805,519 (Boddey). Claims 15-16 are rejected under 35 U.S.C. §103(a) over Kojima in view of U.S. Patent No. 5,301,174 (Matoba). Claim 18 is rejected under 35 U.S.C. §103(a) over Matoba in view of U.S. Patent No. 3,655,988 (Nakamura). Claims 9-14 are rejected under 35 U.S.C. §103(a) over Matoba in view of Kojima. Claim 4 is rejected under 35 U.S.C. §103(a) over Kojima in view of Boddey and U.S. Patent No. 5,635,848 (Hammond). Claims 5 and 7 are rejected under 35 U.S.C. §103(a) over Kojima in view of Boddey and Matoba and Hammond. Claim 6 is rejected under 35 U.S.C. §103(a) over Kojima in view of Boddey, U.S. Patent No. 4,783,774 (Enomoto) and Hammond. It is

respectfully submitted that claims 1-2 and 4-21 are patentable Kojima, Boddey, Matoba, Nakamura, Hammond and Enomoto for at least the following reasons.

Kojima is directed to an electromagnetic actuator drive circuit 100 for driving an actuator 1. The actuator drive circuit 100 includes a negative resistance circuit shown as reference numeral 36 in FIG 5 and reference numeral 37 in FIG 6. As shown in FIG 5, the negative resistance circuit 36 include in input resistance R_i 48 connected to ground through a capacitor C_i 49, an output resistor R_o 46, and another resistor R 45.

Assuming, arguendo, that the capacitor C_i 49 acts as a switch, as alleged on page 4 of the Final Office Action, it is still respectfully submitted that "at least one switch for selectively connecting the input resistor to the first resistor or the second resistor in response to a control signal from a controller," as recited in independent claim 8, is nowhere disclosed or suggested in Kojima. Rather, Kojima clearly shows in FIGs 5-6 that the input resistor R_i is connected to both the first and second resistors R , R_o .

Further, as correctly noted on page 5 of the Final Office

Action, Kojima "does not disclose wherein the electrical damping element is connected in series with the controller and the actuator," as recited in independent claim 1, and similarly recited in dependent claim 18. (Final Office Action, page 5, paragraph 2, lines 9-11, last sentence; emphasis added) Boddey is cited in an attempt to remedy the deficiencies in Kojima.

Boddey is directed to system for controlling the operation of mechanical dampers serving ventilation apertures in the structure of a building. It is respectfully submitted that Boddey is not pertinent to and does not disclose or suggest any electrical damping element. Rather, Boddey discloses mechanical dampers. One skilled in the art of electrical dampers would not turn to the art of mechanical dampers. Assuming, arguendo, that the combination of Kojima and Boddey is proper, at best, such as combination shows a negative resistance circuit 36 connected in parallel along with a mechanical damper connected in series with the actuator 1 of Kojima. An "electrical damping element [which] is connected in series with the controller and the actuator," as recited in independent claim 1, and similarly recited in dependent claim 18, is nowhere disclosed or suggested in Kojima, Boddey, and

combination thereof.

Matoba is directed to an optical disk recording and reproducing apparatus that performs coarse and fine access. Matoba is completely silent about any electrical damping element having a negative resistance. FIG 2 of Matoba is referred to on page 9 of the Final Office Action to show connection of elements that are have nothing to do with any electrical damping element, let alone one having a negative resistance. Further, Kojima clearly shows in FIGs 5-6 that a negative resistance circuit is connected between node E and ground, where node E is the same node which is connected to the actuator input that receives the drive signal.

In stark contrast, the present invention as recited in independent claim 9, and similarly recited in independent claim 12, amongst other patentable elements recites (illustrative emphasis provided):

the actuator driver circuit comprising ...
an electrical damping element having a negative
resistance connected between the second terminal
of the actuator and ground, wherein the first
terminal is configured to receive the drive
signal and is different from the second terminal.

An electrical damping element having a negative resistance

connected between a second actuator terminal of the actuator and ground, where the first terminal is configured to receive the drive signal and is different from the second terminal is nowhere disclosed or suggested in Kojima. Rather, FIGs 5-6 of Kojima clearly show that the negative resistance circuit is connected between node E and ground, where node E is the same node which is connected to the actuator input that receives the drive signal.

Nakamura, Enomoto and Hammond are cited to allegedly show other features and do not remedy the deficiencies in Kojima, Boddey and Matoba.


Accordingly, it is respectfully submitted that independent claims 1, 8-9 and 12 are allowable, and allowance thereof is respectfully requested. In addition, it is respectfully submitted that claims 2, 4-7, 10-11 and 13-21 should also be allowed at least based on their dependence from independent claim 1, 8-9 and 12.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to

submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

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